

AMERICAN
RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, SEPTEMBER 3, 1859.

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NEW-YORK:

PUBLISHED WEEKLY, BY

JOHN H. SCHULTZ & CO.

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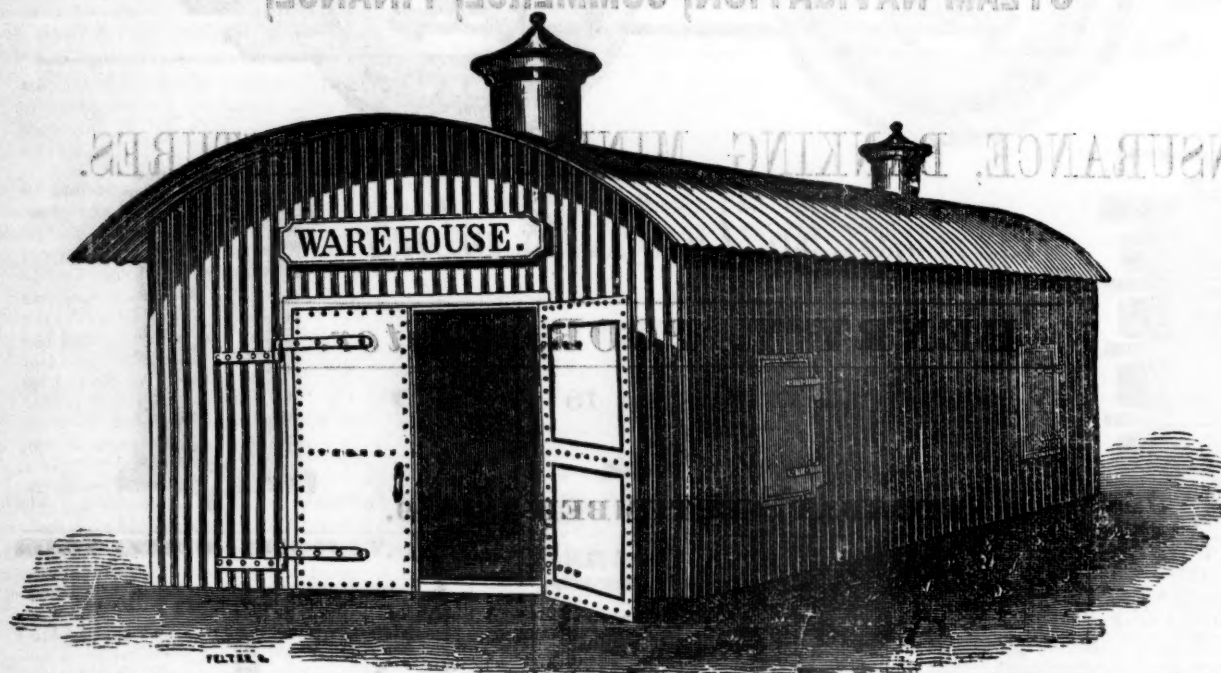
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SECOND QUARTO SERIES, VOL. XV., No. 36.]

SATURDAY, SEPTEMBER 3, 1859.

[WHOLE No. 1,220, Vol. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, September 3, 1859.

New York and Erie Railroad.

We give below the report of the committee of directors of this road, appointed to present a plan for the re-organization of the company and the action on the same by the directors.

To the Bond and Stockholders of the New York & Erie Railroad Company:—

The embarrassments of the company and the action of its creditors having resulted in the appointment of a receiver, the directors have lost no time in endeavoring to mature a plan by which the interests of all would be promoted. The most practicable means of harmonizing the various interests involved is contained in the following report of their committee. The committee appointed to devise a plan to extricate the New York and Erie railroad from its present difficulties, report that the capital stock and indebtedness of the company are represented as follows:—

First mortgage bonds	\$3,000,000
Second do.	4,000,000
Third do.	6,000,000
Fourth do.	3,705,000
Fifth do.	1,253,500
Total mortgage debt	\$17,958,500
Unsecured bonds, and interest due on them	7,825,150
Capital stock	11,000,000
Total	\$36,883,650

Bills payable, for the payment of which \$1,500,000 fourth mortgage bonds are pledged, \$320,000

[The payment of the amount due to employees for past services, and for materials and supplies, is provided for in the order of the court appointing a receiver, for which all the earnings up to 1st of December will be required.]

Coupons due on mortgage bonds 211,000 |

Coupons to fall due:—

September 1, on second mortgage bonds, do. third	140,000
October 1, on fourth do.	210,000
November 1, on first do.	129,675
December 1, on fifth do.	105,000
.....	43,872

Total

 \$1,159,547 |

To pay this sum of \$1,159,547, and to reduce the bonded debt and capital stock of the company, the committee propose the following plan:

Convert the unsecured bonds and interest \$7,825,150 at 80 per cent. into new stock at par \$6,260,120 |

Exchange old stock, \$11,000,000 at 20 per cent. into new stock at par 2,200,000 |

\$8,460,120

Assess this \$8,460,120 of new stock 10 per cent. and give new stock at par \$846,012 |

Convert two coupons from each of fourth and fifth mortgage bonds, due half in Oct. and Dec., and half in April and June next, into stock at par, 347,095

1,193,107

New stock \$9,653,227 |

Bonded debt 17,958,500 |

Thus reducing the entire debt and capital stock of the company to ... \$27,611,727—with the exception of \$210,000 due on 1st Sept. for third mortgage interest, for the payment of which a delay of twelve months is asked.

This plan, of course, contemplates that the second mortgage bonds will be extended either by exchange from the remaining bonds of the third series held for that purpose, or by a new sheet of coupons.

Why should this plan or any similar one be adopted? will be the question asked by those interested.

To the holders of the bonds secured by mortgage we may urge the equity of extending to the unsecured creditors and stockholders the benefit of the property pledged to them beyond the amount necessary to secure their debts. They are

asked to part with no security; their overdue interest is provided for, and all the guarantee of prompt payment in the future that an improved organization on a reduced capital can give will be secured to them.

Whereas, in all probability, if an attempt be made to cut off by foreclosure entirely the unsecured debt and stock such an immense interest will oppose every obstacle that legal ingenuity can invent to thwart the foreclosure, and for years to come this property, the value of which depends so much upon skilful management, will be left to the management of the courts and lawyers; and the revenue, if any, will be kept under the control of the courts, until the legal rights of all the parties are determined. Five years would, in all probability, be as short a time as so large and intricate a subject could make the circumlocution of our courts, during all of which time the receiver must operate the road under the orders of some thirty or forty different judges. That much revenue can be expected from a road thus managed—no matter how good the receiver—is not to be even hoped for.

To the unsecured creditors and stockholders the inducement is still greater.

Their condition at the end of the protracted litigation above alluded to would probably be a total loss of their interest, with the addition of large expenses, while by paying the small assessment, for which they receive new stock, they at once come into possession of the road, and control its management under the new organization.

Taking the gross receipts of the road for the last twelve months, (\$4,500,000,) and it is hard to conceive of any casualty that would ever again reduce them so low; the net result shows more than sufficient to pay 7 per cent. per annum on over \$20,000,000, besides expending during that period \$760,000 on the road; and the statement for the last six months shows even a more favorable result.

By this compromise, if promptly carried out, the stock would, in the opinion of the committee, soon be a dividend paying investment, and the bonds of the company at once take a high position in the market among the favorite railroad securities of the country.

Respectfully submitted,

SAMUEL MARSH,
DANIEL DREW,
E. J. BROWN,
HERMANN GELFCKE,
E. K. ALBERTIS.

New York, August 27, 1859.

In submitting the foregoing plan to the creditors and stockholders, the Board of Directors are aware of the difficulty of bringing so many interests, represented by so many parties, to concerted action. The peril in which many of the interests

are placed by the pending legal proceedings calls for prompt action. Those who consider their bonds secured by a pledge of the franchises of the company, if left to the conclusion that they must rely upon the prosecution of their legal rights in the courts, will, of course, suffer no delay in thus enforcing their claims; whereas, by the plan proposed, they will see that their interest will be sooner paid, and their rights more certainly protected, than by the law's delay and uncertainty. But this must be evidenced by immediate action, and it is to induce such action, and to place before those interested a basis of amicable and equitable adjustment that the Directors make the foregoing suggestions, and that they now call on the creditors and stockholders to take prompt measures to protect their several interests, as far as they can be protected by the property and franchises of the company.

In furtherance of this object the Directors have prepared this recommendation in the form of a circular, and directed their Secretary to transmit a copy to the bond and stockholders so far as known, and to furnish copies to all parties calling therefor, and they respectfully solicit that each party interested in the bonds, or who approves of the plan here recommended, should signify such approval to the Secretary, No. 45 Wall street, with as little delay as possible.

By order of the Board.

We take it that some plan similar to the above will be adopted, if any can be; though, with the concern in the hands of the law, it is hard to tell what will be done, or how soon the road can be brought to a sale. It is upon effecting such sale, under the 4th or 5th mortgage, that all plans must be predicated. If a sale be effected, the only option left to the unsecured parties will be to come in and get something, or stay out and get nothing. Should any one decline to convert his bonds or stock, and pay such assessment as may be laid upon it, his option will probably be thrown open to the public, upon some terms not yet indicated.

The unsecured bondholders may object to the proposed reduction of 20 per cent. on the conversion of their bonds into stock. Were it not for sharing the new stock in common with the old stockholders, thereby diluting their bonds still further, they will be the gainers by having their interests represented by stock which will give them the control, management and income of the road, subject only to the rights of the mortgage bondholders. They are now subject to them without any control or voice in the management of its affairs. It is probably for the interest of the unsecured bondholders not to cut off the stockholders entirely, but to let them come in at a nominal rate, to insure their co-operation and good will. These are worth something—how much, we do not pretend to say. We apprehend, however, that the action of the unsecured bondholders will not be influenced so much by the particular manner in which the general plan to be adopted may be modified, as upon the probable future net income of the road. They are in that position, and in that frame of mind, in which they would gladly accept six, or five, and perhaps four per cent. on their investment, could that rate be secured to them. The first question asked will be, "What expectations can we reasonably entertain, provided we accede to the scheme proposed?" What is the answer that can be given to this question?

The first and most important condition to a favorable one, fortunately exists in the very large income which, under the most adverse circumstances, the road has shown itself to be capable of

earning. For the six years past the gross and net incomes have been as follows:

Year.	Gross income.	Current expenses.	Net earnings.
1854	\$5,359,958	\$3,007,516	\$2,352,442
1855	5,488,993	2,861,875	2,627,118
1856	6,348,990	3,201,996	3,146,994
1857	5,742,606	4,054,681	1,687,925
1858	5,151,616	*3,000,000	1,279,708
1859	*4,500,000	3,871,908	1,500,000

\$32,592,163 \$19,997,926 \$12,594,237

* Estimated.

The net earnings for the 6 years have equaled \$2,099,000 annually, being the interest on very nearly 30,000,000 of dollars! With its finances restored, and the road in good order, it certainly ought to do as well for six years to come. The expenses have been almost exactly 60 per cent. of the gross earnings. A similar per centage for six years to come would pay the interest on all the indebtedness, and allow the accumulation of a handsome surplus.

The difficulty is not so much with the road as with its management. It can take care of its indebtedness could the parties be found who could make all that is capable of being made out of it. It is a burning shame that there cannot be found the capacity requisite to render a great work successful, simply by saving what it earns.

English vs. American Rails.

EDITOR RAILROAD JOURNAL.

From the extensive circulation given to the letter written by the superintendent of the Central Georgia railroad respecting the trial of English and American rails, it might be supposed that the question as to the quality of the two makes, had abruptly changed in favor of the American, and that hereafter the English make will become obsolete in this country.

The letter only shows that one lot of American rails are wearing better than a lot of English, while the reverse of this is the case in a score of instances on various roads in this country. The English rails are reported to have cost \$5.00 per ton above current price, it would be interesting to know whether they were purchased from stock in this country or made to the order of the C. G. R. R. Co. as no doubt the American were. The writer offers to put to the test 56 lbs. rails of English make (because he has a sample of that size) against the same size of any American manufacture, before a committee of engineers.

First, by placing a rail upon blocks four feet apart and then putting twelve tons upon it, the deflection not to exceed one-tenth of an inch which the rail must recover when the pressure is taken off.

Second, to place a rail under the same circumstances and subject it to a weight of thirty tons for five minutes.

Third, to allow a weight of six cwt. to fall on the rail at a height of seven feet, three times.

Fourth, to increase the third test to one ton.

Fifth, to place the rails side by side on any road the committee may designate where the engines are of the greatest weight and the traffic known to be of the heaviest description.

That the American mills are turning out some of the best quality of rails there can be no doubt, and that they will ultimately supply every home demand is no less certain; but that time has not yet arrived, and until the American rails have

performed a daily service for twenty years, they will not have reached the practical test and proof that English make are now subject to. R. O.

Foreign Commerce of New York.

In the year 1821, the Foreign Imports of this State were only 23 millions out of 62 millions for the whole country, or nearly three-eighths of the whole. In 1831, this proportion had increased to over fifty per cent.; in 1841, to nearly 60 per cent., and in 1857, to about two-thirds the whole. From the annual report of the Chamber of Commerce of New York, the following summary is taken, showing the Imports and Exports of the State of New York, compared with those of the United States for the separate years 1821, 1831, 1841, 1851, 1857, 1858, with the Imports per capita of the United States:

IMPORTS.			
Year.	United States.	State of N. Y.	Pr. ct.
1821	\$62,585,000	\$23,629,000	37.75
1831	103,191,000	57,077,000	55.31
1841	127,946,000	75,713,000	59.18
1851	216,224,000	141,546,000	65.53
1857	360,890,000	236,493,000	65.53
1858	282,613,000	178,475,000	63.00

EXPORTS.			
Year.	United States.	State of N. Y.	Pr. ct.
1821	\$64,974,000	\$13,160,000	20.25
1831	81,310,000	25,535,000	31.40
1841	121,851,000	33,139,000	27.20
1851	218,388,000	86,007,000	39.38
1857	362,960,000	134,803,000	37.14
1858	324,644,000	108,340,000	33.33

The following table shows the total Exports of the United States and of the State of New York, for each period of ten years, 1821-1830, 1831-1840, 1841-1850; and for the eight years, 1851-1858, with the per centage of the latter compared with the former:

Years.	Exports of the U. S.	Exports of N. Y.	Pr. ct. of N. Y. to U. S.
1821-1830, 10 y.	\$765,748,752	\$215,833,356	28.19
1831-1840, 10 y.	1,092,341,903	279,588,191	25.60
1841-1850, 10 y.	1,260,564,583	385,322,935	30.57
1851-1858, 8 y.	2,206,990,455	850,218,771	38.52

The following table shows the total Imports of the United States and of the State of New York, for each period of ten years, 1821-1830, and for eight years, 1851-1858, and the per centage of the latter compared with the former:

Years.	Tot. Imports of the U. S.	Tot. Imports of N. Y.	Per cent.
1821-1830, 10 y.	\$798,633,427	\$363,379,563	45.50
1831-1840, 10 y.	1,302,676,084	753,921,699	57.87
1841-1850, 10 y.	1,267,783,782	757,571,840	59.71
1851-1858, 8 y.	2,221,323,155	1,437,482,962	64.72

In order to illustrate more fully the important changes in the Foreign Trade of New York, compared with that of the whole Union, we annex the results for each year from 1821 to 1858. These details form a part of the chapter on New York Commerce, in the annual report of the Chamber:

IMPORTS.			
Year.	United States.	State N. York.	
1821	\$62,585,724	\$23,629,246	
1822	83,241,541	35,445,628	
1823	77,579,267	29,421,349	
1824	80,549,007	36,113,723	
1825	96,340,075	49,639,174	
1826	84,974,477	38,115,630	
1827	79,484,068	38,719,644	
1828	88,509,824	41,927,792	
1829	74,492,524	34,743,307	
1830	70,876,920	35,624,070	
Total	\$798,633,427	\$363,379,563	

IMPORTS.

United States. State N. York.

1831	\$103,191,124	\$57,077,417
1832	101,029,266	53,214,402
1833	108,118,311	55,918,449
1834	126,521,332	73,188,594
1835	149,895,742	88,191,305
1836	189,980,035	118,253,416
1837	140,989,217	79,301,722
1838	113,717,402	68,453,206
1839	162,092,132	99,882,438
1840	107,141,619	60,440,750

Total.....\$1,302,676,084 \$753,921,699

1841	\$127,946,177	\$75,713,426
1842	100,262,087	57,875,604
1843	64,753,799	31,866,540
1844	108,435,035	65,079,516
1845	117,254,664	70,909,085
1846	121,691,797	74,254,283
1847	146,545,638	84,167,352
1848	154,998,928	91,525,141
1849	147,867,439	92,567,369
1850	178,138,318	111,123,524

Total.....\$1,267,782,782 \$757,571,840

1851	\$216,224,982	\$241,546,538
1852	212,945,442	132,329,306
1853	267,978,647	178,270,999
1854	304,562,381	195,427,933
1855	261,468,520	164,776,511
1856	314,639,942	210,162,454
1857	360,890,141	236,493,485
1858	282,613,150	178,475,736

Total.....\$2,221,323,155 \$1,437,485,962

EXPORTS.

United States. State N. York.

1821	\$61,974,382	\$13,160,918
1822	72,160,281	17,100,482
1823	74,699,030	19,038,990
1824	75,986,657	22,897,134
1825	99,535,388	35,259,261
1826	77,595,322	21,947,791
1827	82,324,827	23,834,137
1828	72,264,686	22,777,649
1829	72,358,671	20,119,011
1830	73,849,508	19,697,983

Total.....\$765,748,752 \$215,833,356

1831	\$81,310,883	\$25,535,144
1832	87,176,943	26,000,945
1833	90,140,433	25,395,117
1834	104,336,973	25,512,014
1835	121,693,577	30,345,264
1836	128,663,040	28,920,688
1837	117,419,376	27,338,419
1838	108,486,616	23,008,471
1839	121,028,416	33,268,099
1840	132,085,946	34,264,080

Total.....\$1,092,341,903 \$279,588,191

1841	\$121,851,803	\$33,139,833
1842	104,691,584	27,576,778
1843	84,346,480	16,762,664
1844	111,200,046	32,361,540
1845	114,646,606	36,175,298
1846	113,488,516	36,935,413
1847	158,648,622	49,844,363
1848	154,036,436	53,351,157
1849	145,755,820	45,963,100
1850	151,898,720	52,712,789

Total.....\$1,260,564,583 \$385,322,935

1851	\$218,388,011	\$86,007,019
1852	209,658,366	87,484,456
1853	230,976,157	78,206,290
1854	278,241,064	122,534,646
1855	275,156,846	118,731,238
1856	326,964,908	119,111,500
1857	362,960,632	134,803,298
1858	324,644,421	108,340,924

Total.....\$2,206,990,455 \$850,218,771

Grand Trunk Railway--Portland Division.

The Portland division of the Grand Trunk railway is receiving improvements that will make it one of the most substantial railways in this country. There is now no road operated with greater regularity and safety, or that is more popular with the traveling public.

For two or three years past, the company have been re-building the bridges on the road in a most substantial manner. During the present year two expensive iron bridges have been constructed, one over the Connecticut and the other over Wild river. Another is in progress over the Presumpscot. That over the Connecticut consists of four spans of 80 feet each. The girders are 7 feet high, 2 feet wide, with plates 3-8 inches thick; top plates 7-16, 9-16, 5-8 and 11-16 thick; bottom plates 3-8, 1-2, 9-16 and 5-8 thick, equal to 1 18-20 tons breaking weight for one girder.

The Wild river bridge is on the same plan, but with 6½ inch girders. The plates of these bridges are of Pennsylvania rolled iron, built and put together by the Portland company.

The following is a list of some of the principal bridges on the road, together with their cost, and the material of which they are constructed.

	Material.	Cost.
Presumpscot	Iron.	\$80,000
North Yarmouth	Iron.	30,000
The bridge across Royal river	Iron.	24,000
Danville Junction	Iron.	16,000
South Paris	Wood.	25,000
Bacon Falls	Stone.	12,000
Whitman	Wood.	6,000
Walker's Mills	Wood.	4,500
Bethel	Iron.	16,000
Wild River	Iron.	55,000
Dummer	Wood.	16,000
Northumberland	Iron.	10,000
Connecticut River	Iron.	55,000
Nulhegan, one and two	Wood.	7,000

Michigan Southern Railroad.

The monthly earnings of this road for the present year compared with those for 1858 have been as follows:—

	1858.	1859.
January	\$106,737	\$104,179
February	97,312	106,059
March	160,612	142,158
April	206,505	144,512
May	187,799	137,518
June	178,927	122,106
July	149,603	102,027
	\$1,087,495	\$858,151
Loss for the 7 months		\$229,327

A corresponding loss for the balance of the year will make the total earnings for the year about \$1,600,000, against \$2,019,424 for 1858. The current expenses including the damages for the late accident will, probably, fully equal \$1,200,000, presenting a very uncomfortable prospect for the coming year. There was paid last year to interest and sinking fund, \$775,981. The current expenses last year were \$1,242,152.

The conclusion which these figures force upon a person is that the company is in a perilous position. Nothing but extraordinary skill in its management can enable it to meet the interest on its indebtedness. The present managing directors are a perfect set of old fogies, and if continued in office, will, in our opinion, certainly run the concern ashore. If the bondholders would be certain of their interest, they will do well to keep a sharp look after this road. We fear the stockholders of

either class have but little motive to busy themselves about the road.

Aid Granted by the State of New York for Internal Improvements.

The amount of money expended by the State of New York, for internal improvements, has been as follows:

For the New York Canals	\$8,401,408
" " Enlargement of the Erie Canal	46,746,021
" " Construc'n of the lateral canals	14,719,713

Total for the canals.....\$69,868,137

For the New York and Erie Railroad	\$3,000,000
" " Ithica and Owego Railroad	315,200
" " Canajoharie and Catskill R. R.	200,000
" " Hudson and Berkshire Railroad	150,000

\$3,665,700

These sums granted to railroads have been either given outright, or have been lost by the failure of the railroad.

In addition the State loaned its credit to the following roads, which is either well secured, or has been repaid.

To the Tonawanda Railroad	\$100,000
" " Auburn and Syracuse Railroad	200,000
" " Long Island Railroad	100,000
" " Schenectady and Troy Railroad	100,000
" " Auburn and Rochester Railroad	200,000

\$700,000

Muscogee Railroad.

The Columbus Branch of the Southwest (Ga.) Railroad diverges from the main line at Fort Valley, 28 miles below Macon, and runs thence to Butler, in Taylor County, a distance of 15 miles. Thence to Columbus, 50 miles, the line is continued by the Muscogee Railroad Company. The report of the officers of this company for the fiscal year ending July 31st, 1859, was submitted to the stockholders on the 8th August. From this we learn that the receipts from all sources during the year were:

From Freights	\$135,775 00
" " Passengers	57,278 90
" " Mails and dividends	9 665 58

\$202,714 48

The expenses for same time were:

Maint'ce of motive power	\$20,722 03
" " cars	7,473 47
Repairs of road and br'dgs	27,414 15
Wood and water	5,369 05
Miscellaneous	31,219 61

92,198 31

Net earnings	\$110,516 17
Less int. on \$249,000 bds.	\$17,430 00
Less dividends on preferred stock	3,377 50
Do. guaranteed stock	4,800 00—25,607 50

Balance	\$84,908 67
To which add balance from last report	41,435 27

\$126,343 94

Less dividend in Feb. last on general stock	22,448 00
---	-----------

Surplus profits.....\$103,895 94

From which a dividend of 4 per cent. on 5,612 shares of general stock was declared on the 8th of August last.

The gross receipts of the past exceed those of the previous year by.....\$55,418 01

While the expenses have increased only 8,374 15

Making a net increase of.....\$47,043 86

Included in these expenses are \$13,717 81, for

repairs of engines, cars, road and bridges, caused by the disaster at Randall's bridge in December last. Deducting this amount, from the expenses, will leave the cost of working and keeping up the road \$78,480 50, which is a decrease of \$5,324 66 as compared with the previous year.

The expenses of keeping up the road will be much greater this than the past year, as it will be necessary to lay one and a-half miles of new rail, to complete the repairs at Randall's and Cox's Creeks; also the connection of the Montgomery and West Point Railroad at Columbus, the cost of which is to be borne equally by the two companies. The benefits to be derived from this connection, it is believed, will reimburse the company in two years by an increase of business and the saving in drayage and omnibus fare.

GENERAL STATEMENT.

Capital stock.....	\$561,200 00
Preferred ".....	48,250 00
Guarant'd ".....	60,000 00
Old scrip not returned.....	500 00
Bonds issued at 7 per cent.....	249,000 00
Dividends unpaid.....	4,022 75
Surplus profits.....	108,895 04
	<hr/>
	\$1,026,868 69
Construction.....	\$774,244 15
Equipment.....	162,534 23
Stocks and bonds.....	20,800 00
Negro property.....	428 00
Bills receivable.....	4,394 60
Cash and cash assets.....	64,467 71
	<hr/>
	\$1,026,868 69

The officers are:

J. L. MUSTIAN, *President and Superintendent.*

J. M. BIVINS, *Treasurer.*

Williamsport and Elmira Railroad.

This road is in trouble, and the managers propose the following plan for its relief:

To ask the 1st mortgage bondholders to fund four coupons for two years, say including January 1, 1861—and that they should receive for the same, six per cent. bonds of the company, secured as follows, on which interest should be paid semi-annually as due, commencing with January 1, 1860—so far as due. This, with the scrip already received for 1858 coupons, would amount to two hundred thousand dollars, and in the new mortgage to be drawn would be first secured.....\$200,000

That the chattel bondholders receive in six per cent. bonds secured, under above mortgage, on the real estate, and under a 1st mortgage on the chattels, as at present, seventy per cent. of their bonds, now five hundred thousand dollars, bearing interest from April, 1861—interest, and balance of principal, in a preferred stock.....350,000

That the seconds, now seven hundred thousand dollars, should take six per cent. bonds for fifty per cent., to be issued under above mortgage, bearing interest and balance of principal in a preferred stock.....350,000

That the net income of the road, for two years, be applied to the extinguishment of the floating indebtedness of the company, which, with the collaterals released, and the remaining one hundred thousand dollars of the million bonds now proposed to be issued, would, it is estimated, entirely discharge this floating debt; any deficiency, however, to be liquidated proportionately in a preferred stock.....100,000

Total.....\$1,000,000

This would make, in addition to the present 1st

mortgage, a 2d mortgage of one million dollars, bearing interest at 6 per cent., and, we believe, the road will earn, two years hence, \$180,000 a year, or the interest on both mortgages.

The liabilities of the Co. will then consist of—
First mortgage, as at present.....\$1,000,000
Second mortgage, as proposed.....1,000,000
Preferred stock, estimated.....850,000
Common stock, now \$1,500,000, to be reduced one-third.....1,000,000

Total.....\$3,850,000

It will thus be seen that the total capital of the road, fully equipped, would be less than \$50,000 per mile; of which, about \$25,000 per mile would be represented in mortgage debt, and the remainder in stock.

So soon as the reviving business of the country should enable the road to pay more than the interest on its indebtedness, the preferred stockholders would realize it. And the value of the common stock of the company would, as reconstructed under the above arrangement, undoubtedly be greater than it can possibly be while encumbered with so great a load of floating debt as has always rested over it.

This plan, which has been prepared after great deliberation, and on consultation with a number of the parties largely interested, appears to the managers the only course which can save the company from the disastrous results of litigation and ultimate foreclosure.

Machinery Department of the Sandusky, Dayton and Cincinnati Railroad.

The following is a recapitulation of the operations of the machinery department of the Sandusky, Dayton and Cincinnati Railroad for the year ending June 30, 1859:

LOCOMOTIVE ENGINES.

Miles run by all the trains.....	532,130
Cost of repairs, labor and mat'l.....	34,411
" " " " pr. m. run.....	.646
" " oil and waste used.....	4,416
" " " " per mile run.....	.82
Total cost of repairs, oil and waste.....	38,821
" " " " pr. m. run.....	.725

There was during the year rebuilt, eight, and one new engine, except the frame, partly built at a cost of \$16,204 69. This was an extraordinary expense, which is included in the repairs of engines, but should be deducted to compare the cost with previous year, 1858, as nothing but the actual repairs is included in that year. The cost per mile run for repairs for the year ending June 30th, 1858, was .564 cents per mile. With this extraordinary expense for the year ending June 30th, 1859, the running expense was .646 cents per mile, or an increase of .082 per mile over 1858. Deducting this extraordinary expense, shows the actual cost for repairs to be .342 per mile, or a decrease of .222 per mile run.

In the charge for repairs is embraced the oil and waste used in the shop, and in the repairs of machinery, tools, etc., etc.

REPAIRS OF CARS, BUILDINGS, TOOLS, ETC., ETC.

Cost of repairs of Freight cars.....	\$23,380
" " Passenger cars.....	6,010
" " Buildings.....	2,263
" " Stationary engines.....	1,544
" " Tools, etc.....	4,389
" " Railroad iron.....	4,337
" " Locomotive engines and oil & waste, as stated above.....	38,821

Total cost of maintaining department of machinery.....\$80,544
Do, for 1858.....93,810

Decrease.....\$13,266

EXTRAORDINARY PERFORMANCES.

Engine Berwick, J. Window, Engineer, run, on freight trains, 19,628 miles, costing for repairs .156 per mile run.

Engine Warren, E. M. Frederick, Engineer, run, on freight trains, 18,690 miles, costing for repairs .182 per mile run.

Engine Belmont, A. Bovee, Engineer, run, on freight trains, 16,055 miles, costing for repairs .157 per mile run.

Engine St. Lawrence, J. Lansdown, Engineer, run, on passenger trains, 19,906 miles, using 460 pints of oil, or one pint to .50.39 miles.

Engine Mississippi, C. E. Clark, Engineer, run on passenger trains, 19,906 miles, using 460 pints of oil, or one pint to .43.27 miles.

Engine Niagara, H. Brooks, Engineer, run, on passenger trains, 20,326 miles, using 496 pints of oil, or one pint to .40.97 miles.

The average number of miles run to the pint of oil was .20.26.

The total force employed in repairs was 132 hands; and including enginemen and firemen, 186.

The Superintendent of the road is John W. Hudson—Master Machinist, Charles H. Sult.

Locomotive Department of the Illinois Central Railroad.

The cost of maintaining and operating the locomotive department of the Illinois Central railroad for the month of July was as follows:

Miles run by passenger trains.....	79,562
Do, freight do.....	51,563
Do, construction do.....	27,203
Do, wood do.....	2,958
Do, switching do.....	17,697

Total miles.....178,983

Pounds of waste used.....	2,297
Gallons of oil do.....	1,451
Cords of wood do.....	3,130
Tons of coal do.....	661

Wages of enginemen and firemen.....	\$7,126
Repairs of engines.....	8,918
Value of oil and waste.....	1,384
Do, wood and coal.....	14,660
Cleaning engines.....	1,143

Total cost.....\$33,231

Cost of oil and waste per mile run.....	.77
Do, wood and coal do.....	8.19
Wages of enginemen and firemen.....	do. 3.98
Cost of repairs.....	do. 4.98
Cleaning engines.....	do. .63

Total cost per mile run.....18.55

Average number of cars per train.....	8
Do, miles to pint of oil.....	15.42
Do, cord of wood.....	47.86
Do, do, ton of coal.....	44.73

The value of wood on tender is rated at \$4.31 per cord; of coal \$1.80 per ton.

Re-building, superintending, teaming and other expenditures appertaining to repairs are included in the above aggregates.

The cost of the different items for July compared with the six months ending June 30, is as follows:—

	For July.	For the half-year.
Cost of oil and waste.....	.77	.81
Do, wood and coal.....	8.19	8.93
Wages of enginemen and firemen.....	3.98	3.88
Cost of repairs.....	4.98	5.57
Cleaning engines.....	.63	.66
Total.....	18.55	19.85

Locomotive Department on the Louisville and Lexington Railroad.

The cost of maintaining the locomotive department in this road the past year was as follows:—

	Cost per	Cost, mile run.
Fuel	\$18,617	7.94
Stores	2,023	86
Repairs	18,517	7.94
Oil and waste	4,456	1.90
	\$43,613	18.64

Adding 5 cents per mile for enginemen and firemen, the total expense of this department for the year would be 23.64 per mile run. The total number of miles run was 234,323.

Journal of Railroad Law.**RIGHTS OF PERSONS EMPLOYED BY RAILROAD COMPANIES—ACTIONS FOR DAMAGES.**

It is now a well-established rule of law, and one of considerable practical importance in the management of railroads, that one servant or agent of the company cannot maintain an action against the company for an accident happening through the negligence of a fellow servant. If the switch-tender mismanages his switch, and the consequence is a collision of trains, whereby the engineer, conductor and passengers are injured, the passengers may sue the company for damages; but the conductor and engineer cannot. The reason is, that in accepting employment on the road, the latter are understood in law to take the risk of accidents resulting from the negligence of their fellow-servants.

This principle receives a striking illustration in the case of *Boldt agt. The New York Central Railroad Company*, recently decided in the New York Court of Appeals. The plaintiff sued for damages for injuries received through the alleged negligence of the defendants servants in running a locomotive upon him.

Upon the trial, it appeared that the defendant was engaged in the construction of a new track parallel to, and about six feet distant from its old track, which was then in use. At the time of the accident, the new track had not been completed, and no trains had run upon it, except some conveying gravel for ballasting. The plaintiff was a laborer who had been employed about a month, under the direction of an agent of the defendant, in graveling and leveling the new track, being hired for this purpose only. He was walking, early in the morning, from his residence along the new track to the place where he was to work, when he was overtaken and struck down by a train of passenger cars, running upon the new track in consequence of the old track being obstructed by an engine disabled upon it, from an accident on the previous night. The defendant moved for a non-suit, which was refused, and an exception taken.

On appeal from the decision of the Court below, it was decided that the plaintiff could maintain no action. The following are the reasons of the Court sustaining this conclusion:

JOHNSON, CH. J.—The general rule that an employer is not responsible to one employee for injury occasioned by another employee, engaged in the same general undertaking, is firmly settled in this State. (*Sherman vs. Rochester and Syracuse Railroad Company*, 17, N. Y., 153; *Russell vs. Hudson River Railroad Company*, *id.* 124, and cases therein cited.) The plaintiff was employed to labor in graveling and ballasting a new track

which was on the same road-bed with, and about six feet distant from, the old track, and was injured by a train of cars of the defendants running on the new track, on which no train of cars had before been run. The plaintiff who suffered and the persons who caused the injury were in the service of one employer,—the railroad company—the plaintiff in preparing a track and the others in running trains, but both in the common enterprise of maintaining and operating the railroad. If the plaintiff had been engaged in repairing the old track and the injury had occurred to him while digging gravel for that purpose, on the site of the new track by the cars being thrown from the track and falling upon him, his case could not in principle have been distinguished from that of a switch-tender or other person employed in the company's service about the track, and injured in such service. Nor can I conceive that a different principle would apply in case the same accident occurred while the injured person was employed in preparing a new track on the site of the gravel pit, instead of digging gravel to repair the old track. In each case the liability to injury would be incident to the employment. In accepting service on such a new track, in the case supposed, he must be taken to have known that his employers were engaged in running cars on the old track, and that he was, therefore, to incur such hazard as might be occasioned by the negligence of their employees. So in the case at bar, he must be taken to have contracted with reference to the possibility of cars being run on the new track, whenever it became so nearly finished as to render such running practicable. When the plaintiff was injured, he was walking on the new track from his house to his work, but he was in the defendants' employment and doing that which was essential to enable him to discharge his particular duty, viz: going to the spot where it was to be performed, and he was moreover going on the track where, except as the servant of the company, he had no right to be, he was there as the employee of the company, and because he was such an employee. Upon this point as well as upon the other, *Gillshannon vs. Stoney Brook Railroad Company*, (10, Cush., 228), and the cases before cited, lead to the result that the recovery was not warranted by law.

Steamboat Arrivals at St. Paul.

The following table will show the number of arrivals at St. Paul during the last fifteen years, and the increase or decrease of the preceding year:

In 1844 there were	41 arrivals.
In 1845 " " "	48 " increase 17 pr. ct.
In 1846 " " "	24 " decr'se 50 " "
In 1847 " " "	47 " increase 96 " "
In 1848 " " "	63 " " 34 " "
In 1849 " " "	85 " " 35 " "
In 1850 " " "	104 " " 25 " "
In 1851 " " "	109 " " 14 " "
In 1852 " " "	171 " " 44 " "
In 1853 " " "	235 " " 32 " "
In 1854 " " "	310 " " 32 " "
In 1855 " " "	563 " " 49 " "
In 1856 " " "	759 " " 35 " "
In 1857 " " "	965 " " 27 " "
In 1858 " " "	1,090 " " 13 " "

—showing an average annual increase during the last fourteen years of 28 per cent.

The number of boats engaged in the trade in 1850 were 7; in 1851, 11; in 1852, 17; in 1853,

23; in 1854, 38; in 1855, 68; in 1856, 79; in 1857, 99; in 1858, 62—showing an average annual increase of 30 per cent.

The following will exhibit the dates of the arrival of the "first boat" through the lake, for the last fifteen years:

1844—Steamer Otter, Capt. Harris.....	April 6
1845— " Otter, Capt. Harris.....	April 6
1846— " Lynx, Capt. Atchison.....	March 31
1847— " Cora, Capt. Throckmorton.....	April 7
1848— " Senator, Capt. Harris.....	April 7
1849— " High'd Mary, Atchison.....	April 9
1850— " Highland Mary, Atchison.....	Apr. 19
1851— " Nominee, Capt. Smith.....	April 4
1852— " Nominee, Capt. Smith.....	April 16
1853— " West Newton, Capt. Harris.....	Apr. 11
1854— " Nominee, Capt. Blakely.....	April 8
1855— " War Eagle, Capt. Harris.....	Apr. 17
1856— " Lady Franklin, Lucas.....	Apr. 18
1857— " Galena, Capt. Laughton.....	May 1
1858— " Grey Eagle, Capt. Harris.....	March 25

And the following shows the time of departure of the "last boat," and the number of days navigation during a series of years:

1849, November 19.....	224 Days of Navigation.
1850, " 18.....	213 " " "
1851, " 20.....	230 " " "
1852, " 10.....	208 " " "
1853, " 22.....	225 " " "
1854, " 23.....	229 " " "
1855, " 19.....	216 " " "
1856, " 10.....	206 " " "
1857, " 14.....	198 " " "
1858, " 16.....	236 " " "

The following table shows the annual aggregate amount of tonnage (Custom House measurement) for each year, and the annual rate of increase since 1850:

1850.....	16,640
1851.....	19,255—increase 15 per cent.
1852.....	27,308— " 41 " "
1853.....	39,170— " 43 " "
1854.....	51,740— " 32 " "
1855.....	87,812— " 69 " "
1856.....	124,140— " 41 " "
1857.....	194,268— " 59 " "
1858.....	231,984— " 18 " "

Town Bonds to the Albany and Susquehanna Railroad.

The Schoharie *Republican* states that Judge Gould has rendered his decision in the case of the Albany and Susquehanna Railroad Company at certain towns in Schoharie County. Suits were commenced last fall by citizens of the towns of Seward, Richmondville, Cobleskill, and Schoharie, respectively, against the Commissioners of each of the above-named towns, and against the Supervisors of Schoharie County, to restrain the issuing of bonds by said towns, or the raising of moneys by the Board of Supervisors, to pay interest on bonds to be issued by said Commissioners, for the purpose of aiding in the construction of the Albany and Susquehanna Railroad. An injunction was granted by Judge Gould, during the sitting of the last Schoharie Circuit in Schoharie County, which was subsequently dissolved by Judge Gould himself, upon a motion made for that purpose by the railroad company. Among other questions raised by the pleadings in these several suits, it was claimed by the plaintiffs that "the consent of a majority of the tax-payers, representing a majority of the taxable property" in the several towns, had not been obtained, and the bonds of the several towns could not, therefore, be issued in aid of the company. The cases were noticed for trial at the Schoharie Circuit, but could not be reached upon the calendar, and they were accordingly referred, by consent of parties, to Judge Gould to hear and decide the same. The cases were argued at Sharon Springs during the latter part of July last, and the *Republican* now learns from a private source that Judge Gould has decided each case in favor of the railroad company.

Galena and Chicago Railroad.

The comparative earnings of this road for seven months of the current fiscal year have been as follows:

	1859.	1858.
January.....	\$63,256	\$85,819
February.....	66,138	74,180
March.....	100,203	93,920
April.....	90,041	141,292
May.....	119,321	157,953
June.....	110,656	203,153
July.....	89,856	157,287
	<u>\$639,471</u>	<u>\$913,104</u>
		639,471

Loss.....\$273,633

The total earnings for 1858 were \$1,547,561. A corresponding reduction for the ensuing five months would reduce the earnings for the year to a little below \$1,100,000. The earnings for 1857 were \$2,416,843. The immense reduction shows the prostration of business in the west.

The net earnings for the past year were \$620,329. The per centage of expenses to gross earnings, 60. The amount paid last year for interest, sinking fund and improvement account was \$374,405; leaving a balance of \$227,924. A dividend of 4 per cent., amounting to \$241,024, was paid during the year.

Assuming the same ratio of expenses the present, as the past, year, the net would be about \$450,000, on gross earnings of \$1,100,000, leaving little for dividends. The result will probably be considerably more favorable, as the earnings for the balance of the year will probably exceed these for the past.

The Effect of Speed upon Weight.

(From the London Athenaeum, Feb. 26, 1859.)

I have waited to see whether any one would point out the fallacy of Stephenson's statement (*Athen. No. 1,633, p. 217.*) that either iron or ice will bear a weight passing over it at a greater velocity, which it could not bear if it went slower; and that "when it goes quick, the weight in a manner ceases." The very reverse of this is the truth, as was clearly established by the "Iron Commission," which was appointed a few years since, to inquire into the causes of the breaking down of the iron bridge over the Dee. And the principle so established is now universally acted upon throughout our railways; the speed of the trains upon approaching bridges of any considerable length, whether of iron or wood, is usually slackened to 8, 6, or even 4 miles an hour, according to circumstances; and the same rule, viz, of going slow, and not of going quick, is always observed in passing over an unsound part of an embankment. I was myself present at some very interesting experiments made by this Commission at the iron bridge of the South-eastern Railway, near Epsom, in the presence of Lord Wrottesley, Sir W. Cubitt, the Astronomer Royal, and several others. Prof. Willis had contrived a very ingenious apparatus, which, fixed to the centre of one of the iron girders, measured and registered the deflection of the bridge at the passing over of any weight. An engine with a heavily-laden tender was then passed over the bridge at speeds varying from 10 to 60 miles an hour; and it was found that the greater the speed the greater was the deflection of the girder. K. A. W.

Dubuque and Pacific Railroad.

We were in error in announcing some time since the election of Col. R. B. Mason to the Vice Presidency of this company. On the 2nd ult. he was appointed Superintendent and Engineer of the company; but the election for Vice President has not yet taken place.

Dubuque and Pacific Railroad.

We learn that the negotiations that were pending between this company and OLIVER P. ROOT, Esq., of Oneida, N. Y., for the building of 40 miles of road, have been concluded on terms satisfactory to all parties. Mr. Root agrees to complete the road to Manchester, (47 miles from Dubuque,) by the 1st of October next; to Winthrop (60 miles from Dubuque) by the 1st of November next; to a point 75 miles from Dubuque by the 1st of December next; and to a point 80 miles from Dubuque by the 1st of January next. The contract recognizes Col. R. B. Mason as Chief Engineer, and as referee in case any difference may arise between the parties.

The Niagara Suspension Bridge.

As some reports have been circulated regarding the safety of this structure, the Buffalo Courier publishes the following statement, the facts of which were furnished by Mr. McKenzie, the Resident Inspector and Master Carpenter of the Bridge:

The bridge was completed and opened to traffic in May, 1855. During that year not a bolt gave way, nor was there a single day spent in any repairs. In 1856 all that was done was tightening up or loosening the stays to suit the temperature. In 1857, for the purpose of giving additional stiffness or strength to the lower floor, and not to remedy any defect, beams were placed under the lower floor, and securely bolted to the upper floor. In 1858, a portion of the inch truss rods for a distance of 350 feet in the centre of the bridge were replaced by inch and a quarter rods. This was done as an additional support to the beams. White oak was also used in some portions of the bridge instead of pine, as the latter was found to be too soft and pliable last year. This year, rubber or spring washers have been introduced in place of the iron ones, and they are found to lend additional elasticity to the structure.

All of these improvements have been made, as we have already said, to render the bridge stiffer, and not to remedy any defect found to exist. We went across in one train, and were on the bridge when four other trains passed. Two passed while we were on the railway track, and one while under the lower floor on the scaffolding. During the passage of these several trains but little more motion was perceptible than during the crossing of an omnibus load of passengers, and it would be difficult to detect the difference except for the rumbling noise of the locomotive. We were one of a party of a dozen or so, who went across the Suspension Bridge in the first passenger car that ever crossed over. This was in 1855, and we did not perceive any more motion on Saturday, if as much, as we did at that time. We saw several trains cross and re-cross, and we did not notice that a single passenger left the cars to walk across, and the railroad conductors say that only occasionally a passenger gets out and walks, and then solely for the purpose of getting a better view of the great structure.

It is the duty of the resident inspector to examine every portion of the bridge carefully every week, and report its condition to the Superintendent. We believe the bridge to be safe and secure, and have perfect confidence in its durability.

From thirty to forty five trains a day pass over the bridge, and have passed during the past four years, and we are assured by the Inspector that the bridge sags no more now than it did during the first six months of its use; and he asserts that it is stiffer and safer now than during any period since its completion.

The story, started by the New York Herald, of the sagging of this structure, has called forth from Mr. J. R. Roebling, the builder, who is now a resident of Pittsburgh, a flat denial, attributing it to the malice of some individual. He says:

"Being constantly kept informed, as the engi-

neer of this work, by the superintendent who has it in charge, I can inform you that the correspondent's statement is a gross misrepresentation, made either from ignorance or wilfulness, or perhaps both. I will only add that, in consequence of the contraction and expansion of the cables, the Niagara bridge rises and falls inversely with the temperature amounting to two feet for a hundred degrees. Hence the cry every summer that the bridge is giving way rapidly. This work has undergone no change since its completion, and is well taken care of, and of all the railroad bridges on this continent, it will be the last to fall."

English Emigration Returns.

A compact pocket blue book, of 240 pages, published on Friday, contains the 19th General Report of the Emigration Commissioners (1859). The report, comparing the emigration of 1856, 1857, and 1858, attempts to account for the striking decline noticeable in the number of persons emigrating from the shores of Albion, for last year it fell to 113,972 from 212,875 in 1857 (this latter figure, too, exhibiting a great difference as compared with preceding years). The commercial crisis of 1857, and the distress in the Australian colonies, are said to have been causes greatly instrumental of late in deterring persons from leaving home to try their chance across the Atlantic, or at the distant antipodes. There was also a great demand for men in England. But a more satisfactory and permanent cause of decrease is to be found, says the report, in the altered condition of Ireland. In 1851 not less than three-fourths of the whole number who left the kingdom were Irish.

Since that period the proportion has gradually declined, until, in 1857, it was only 40½ per cent. or two-fifths of the emigration, while in 1858 it fell to 38 per cent. The consequent cause here at work is to be found in the increased prosperity of the working classes in Ireland, and the constant absence of any inducement to emigrate. That it arises from no want of means to pay for passages is evident from the remittance of £472,610 for the purpose of facilitating the emigration of friends and relations during the year 1858. The mortality on board emigrant ships to North America is declining year by year; from 1854 to 1858 it fell from 74 to 19 per cent. Of the 113,972 emigrants last year, 9,704 went to British North America, 59,716 to the United States, and 39,295 to Australia; 60,309 Germans emigrated from Germany to all parts of the world in the same period—a great falling off as compared with previous years. The cause of this decline cannot be assigned with certainty at present. 17,207 emigrants to Australia last year paid their own passages, and 15,910 were assisted. 18,841 emigrants returned last year from America, and 4,863 from Australia and New Zealand.

Dr. Normandy's apparatus for distilling fresh from sea water, has been tried and found to be so satisfactory that it will be used henceforth on board all passenger ships, by express and positive order of the Privy Council. Of 4,442 adult males who emigrated to Canada, 1,651 were farmers, 1,593 laborers, and 932 mechanics.

In conclusion the Commissioners advert to the emigration of the first three months of the present year (1859) as compared with the similar period of former years. The emigration of the first three months of the eight years from 1847 to 1854 inclusive, averaged 50,604 a year, and of the twelve years from 1847 to 1858 inclusive, 43,122. In the first three months of the present year it amounted to only 17,314. The extent to which it is effected by the demands for the military and naval services seems very evident. In 1854, before the commencement of the Russian war, it was 48,665; and in 1855, 36,677; in 1856, 21,859; in 1857, in the interval between the Russian war and the Indian mutiny, 35,007; in 1858, 19,146; and in 1859, 17,314. Of the emigrants during the first three months of the year there went to the United States 10,005; British North America, 59; Australia, 6,167; and to other places, 1,083; making a grand total of 17,314.—*London Times, Aug. 9th.*

Passage of a Steamer from St. Louis to Fort Benton.

One of the most remarkable feats of steamboat navigation ever performed, has just been completed by the steamboat *Chippewa*, which, loading at St. Louis with Indian supplies, made a consecutive trip from that city to Fort Benton, a distance of 4,000 miles. The enterprise was set on foot by Charles P. Choteau, who finally during the trip purchased the boat of her owners, having from the start insured her. She was at Fort Union when purchased, and at that point Capt. Crapster, who started with her, relinquished, and Capt. John B. LaBarge assumed command. A very interesting account of the voyage in the *St. Louis Democrat* states that on the 3d of July she left Fort Union with 130 tons of freight, 10 or 12 passengers, and a crew of 40 or 50 men. Every arrangement had been made which tended toward success, and the determination was expressed to put her through, even if it had to be done over dry bars. At only one point was the channel found so shallow as to be a serious impediment, and there the men hurried into it, dug it out with shovels, and the boat pushed on. The channel between the rocks on the rapids was found to be so narrow that there was great danger, should the boat sheer off in the least, of her being dashed to pieces. To avoid this, the anchor was placed ahead, and the boat pulled over by the capstan. On the 17th of July, the *Chippewa* reached Fort Benton, and the navigation of the Missouri river for near 4,000 miles was proved not only to be feasible, but with able commanders, of easy accomplishment. Heretofore the trip in Mackinaw boats occupied ninety days. The *Chippewa* accomplished it in fourteen days. On the 18th of July her head was turned homeward, and on Wednesday last she reached St. Louis, having been absent a period of eighty-four days.—*Det. Trib., Aug. 23.*

History of City Passenger Railroads.

In 1825, the first passenger railroad in the world was opened between Stockton and Darlington, in England, a distance of thirty-seven miles. The cars were drawn each by a single horse. From such a beginning, what do we see now? We will not at present enter into a discussion of what we consider ordinary railroads, but will confine our attention to tracing the antecedents of city passenger railways. In 1832, the Germantown Railroad was opened, and for a time horses were the motive power. In the same year—indeed, within a few days—a part of the Columbia Railroad was put in use with horse cars also. A few months before that time, a supplement to the charter of the Northern Liberties and Penn Township Railroad Company was passed, extending the time required for the completion of the road (which had been chartered in 1829) to July 4, 1836. Long previous to this, however, the road, now the Willow street Railroad, was opened, and a line of horse cars established between Third and Willow and Columbia bridge, by a Corsican named Luiciani. The first car was called the Paul Amelia. This was, we believe, the first city passenger railroad in the world. It differed from the Germantown and other roads on which cars were run by horse power, in the fact that its cars stopped at our city cars now do, to take up and set down passengers at any point on the line, while the others had regular stations for stopping. Such cars were afterwards run on Branson and Prime streets to Gray's Ferry, as also on Market and Broad streets. But they ceased running some years since. Had these objections, however, been removed, it must be remembered that the demands of traveling citizens were not great. The first omnibus in Philadelphia was started in 1832. In New York, horse railroad cars have run for twenty years or more on the Harlem Railroad, and for a long time without prompting imitation. Dickens, in his *American Notes*, alludes to two stout horses trotting along, "drawing a score or two of people, and a great wooden ark, with ease." From the year 1852, efforts have been made time and again in Philadelphia, to procure from the proper authorities a charter for a passenger

railroad, but for a long time these efforts were ineffectual. All sorts of objections were made. But in November, 1855, a joint special committee of Councils, appointed to look into the matter, reported that "they were decidedly of the opinion that city passenger railroads might, by proper construction, arrangement, and use, be made exceedingly convenient and beneficial to the citizens, and that the experience of New York and Brooklyn so sufficiently attested their utility as to preclude the necessity of argument."

The Philadelphia and Delaware River Railroad Company was chartered April 4th, 1854, to build a road from a point north of Cherry street, Kensington, one square south of Berks street, to Easton. But in two years, this plan being given up, it was determined to extend the road, adapted for horse cars, to Frankford only. By an act, approved by the Governor June 9th, 1857, the company were authorized to extend their road to Southwark, over Fifth and Sixth streets, subject to the approval of Councils. After permission was given to build the road, every impediment possible was thrown in the way, and the commercial crisis intervening at that time, the cars were not run on Fifth and Sixth streets until January 20th, 1858. The whole cost of the road was about \$650,000—hard times and want of experience in the matter combining with other peculiar disadvantages to increase the expense. There are now in use by this company, on seventeen miles of single track, forty-two cars, with a complement of seven horses per car, running each day 3,542 miles on the average, and they carried, during the year past, nearly 4,000,000 passengers.—*Phila. Press.*

Marietta and Cincinnati Railroad.

The management of this road is, by recent changes, again in the control of the same influence that had possession at the time it was opened, in June, 1857. Whatever may be the extent of the embarrassments now surrounding this property, it is the great road of Southern Ohio, and will surely take its place among the most influential lines in all the West. The anti-railway mania of the two years last past has been as violent and unreasonable as was the over confidence in these works previous to that time. On this regurgitating wave, the Marietta and Cincinnati is coming up again in public favor and public confidence. As a condition precedent, of course, fictitious values must be wiped out and real values alone be recognized. When or how the real proprietary will come into possession does not yet appear, but that they will, sooner or later, there can be no doubt.

The Union Railroad, connecting the Marietta and Cincinnati at Scott's Landing with the Baltimore and Ohio at Parkersburg, is progressing to an early completion. The track will be down in a few days to a point three miles above Parkersburg. This will take the cars below all obstructions from low water.

The improvement in the road-bed, machinery, and general police of the Marietta and Cincinnati has been very marked within the last year. We are prepared, from personal observation, to say that it compares, in the matter of police and regularity of movement, with the best in the country.—*Cin. Commercial.*

Detroit and Milwaukee Railroad.

On Monday next, the two new sea-going steamers, Detroit and Milwaukee, now nearly finished at Buffalo, will leave for the upper lake. We observed that the work on the harbor at Grand Haven is being pushed with all possible despatch. Several hundred feet of piles have already been closely driven for a solid substantial pier. The expense of this improvement, (which should be done by the Government,) is all defrayed by the railroad company, and will insure a depth of water at the entrance of the harbor sufficient for all ordinary lake craft, and will prevent the formation of sand bars at the mouth of the river. As long as the affairs of this road are as ably managed as at present, there is not the least danger of any other route competing with it for the Eastern travel from the North-west.—*Milwaukee Wisconsin, Aug. 20.*

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending August 30, 1859.

BONDS.	Per cent.
Little Miami, 1st Mort.	6s.....82½ and int.
Covington and Lexington, 2d Mortgage	7s.....65
Cinc., Ham. and Dayton, 2d Mortgage	7s.....85
Indianap. & Cincinnati, do.	do.....82½

STOCKS.

Cincinnati, Hamilton & Dayton	67
Columbus and Xenia	82
Indianapolis & Cincinnati	100
Little Miami	99

Railroad Earnings.

The earnings of the Terre Haute, Alton and St. Louis road for June and July, 1859, as compared with same time in 1858, were:—

	1859.	1858.
June	\$52,152 22	\$41,778 00
July	47,231 16	43,262 88
Total	\$99,383 38	\$85,040 88
Increase in 1859 of	\$14,342 50	

The following are the earnings of the Grand Trunk Railway of Canada for the week ending August 6th:

Passengers	\$21,244 13
Freight	15,540 15
Parcels, mails and sundries	2,349 46
Total	\$39,133 74
Corresponding week last year	36,774 27

Increase

The receipts of the Grand Trunk Railway of Canada for the week ending August 13, were	\$38,874 41
Week ending Aug. 14, 1858	31,721 39

Increase

Total traffic from July 1st	\$250,397 68
Same period last year	239,098 25

Increase

The traffic of the Great Western Railway of Canada for the week ending August 19, 1859, was as follows:

Passengers	\$25,316 68
Freight and live stock	8,211 81
Mails and sundries	1,401 43

Total	\$34,929 92
Corresponding week of last year	35,379 35

Decrease

The following is a comparative statement of the earnings of the Northern Central Railway Company for the month of July.

	From 1859.	1858.	Increase.
Merchandise	\$24,938 20	\$21,305 02	\$3,633 18
Coal	16,898 87	13,680 35	3,218 52
Passengers	24,831 45	21,652 03	3,179 42
Mails	2,425 00	1,487 50	937 50
Sundries	78 95	78 95
Totals	\$69,172 47	\$58,124 90	\$11,047 57

The earnings of the Cincinnati, Wilmington and Zanesville railroad in June were \$13,007 64. The operating expenses, repairing, improving, etc.

.....	12,887 90
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The receipts during June from all sources were

\$13,841 14; and the disbursements, \$14,149 86, In July the earnings were	\$12,247 08
And the expenses	11,168 96

The receipts from all sources during July were	\$1,078 12
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\$10,640 49; The receipts from all sources during July were	\$10,640 49
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A statement of the receipts of the Virginia and

We invite attention to the advertisement, in another column, of LUCIUS HART, Esq. The metals mentioned in the advertisement are imported by Mr. H., and furnished by him to Railroad Companies and Machinists at the lowest rates. Babbit, or anti-friction metal is largely used by them. Mr. H. supplies either the manufactured article, or the raw material from which it is made, viz: tin, antimony, copper, etc. Address LUCIUS HART, Esq., Nos. 4 and 6 Burling Slip, N. Y.

Iron Cars.

An iron passenger car has recently been constructed at Paterson, N. J., according to LAMOTHE'S Patent, for the Boston and Worcester railroad. It does not differ materially in size or appearance from the wood car of a similar class. Without the platforms, it is 46 feet long and has 30 seats. It is a little wider than the ordinary narrow gauge cars.

It is not, however, in the difference of shape or finish that this car is distinguished from others, but in the material of which it is constructed—iron.

The bottom or platform of the car "is composed of a series of longitudinal bands of iron, placed edgewise, from which others cross from side to side. The sides are also formed of longitudinal and upright bands crossing each other and strongly riveted together, the whole terminating in a spine which runs lengthwise along the roof. After the panels have been put in, it will be seen that the whole is nothing more or less than a tubular bridge of enormous strength, yet much lighter than the ordinary wooden car. The number of rivets used exceeds 9,200, and the number of feet of band iron 6,200. The latter is two inches wide by one-seventh in thickness, except under the floor and platform, where it is from four to six inches wide." This, we are aware, is a very inadequate description, but it is difficult to give one without the exhibition of a cut or model. Suffice to say that the car, so far as provision is made for strength, is composed entirely of iron disposed in a manner to get the greatest amount of strength, with the least weight; and as every plate or band used has a distinct duty to perform, it will be readily understood that the car may be as much lighter and much stronger than the wooden car, as iron is stronger than wood in proportion to its weight.

Another advantage claimed is its *durability*, the small amount of wood used, being simply for the purpose of ornament, or upholstery. Nothing but iron is exposed to the action of the weather. Well painted, it may last for an indefinite period. Exposure to the weather will have no effect upon it, either to cause it to decay, or to weaken it by the shrinkage of its parts, as in the case of wooden cars. For hot climates in particular, the iron car must prove of great advantage over the wooden one.

In cases of collisions or of accident it would, probably prove much safer than the wooden car. It might be bent up, and twisted out of shape, but it could not be broken.

We presume it can be furnished as cheaply as the wooden car. If so, there must on every account be great economy in its use. It will weigh two or three tons less, than the other. Here is

another considerable advantage. In style of finish, the one described will compare favorably with the best styles to be found on any of our roads. In fact, it may be taken as a model of graceful design, and of exquisite workmanship, which, with its intrinsic merits cannot fail to commend it to the railway public. It was built by Mr. Cundell, of Paterson, and painted by Mr. David Milne. The chief proprietor and agent is E. W. Sargent, Esq., No. 15 Broadway, New York, from whom further information may be obtained.

Interest and Dividends.

The trustees of the first mortgage bonds of the Vermont Valley railroad (Bellows Falls and Brattleboro') have declared a dividend of 50 per cent. on the interest coupons of October, 1856, payable on the 29th.

The Florida *Sentinel* says that the funds for the payment of interest due Sept. 1, on the Florida and Atlantic and Gulf Central railroad, has been deposited in the State Bank at Tallahassee.

The following described Detroit City Bonds will be redeemed at the Metropolitan Bank, in the City of New York, September 1, 1859:

Bonds issued September 1, 1839, and numbered 1 to 86, inclusive, each \$500	\$43,000
Bonds issued April 1, 1841, and numbered from 87 to 100 and from 1 to 20, inclusive, each \$500	17,000
Total	\$60,000

The Richmond and Danville Railroad Company has declared a dividend of four per cent. on its capital stock, payable on the first day of December next.

New York and Erie Railroad.

Mr. Moran has resigned the Presidency of this road, and also, we believe, his place as Director.

Hudson River Railroad.

We give on the following page a statement showing the operations of this road for five years ending September 30, 1858.

The result, so far, has been more advantageous to the public than to the owners of the road; the former have been favored with an admirable road, running at high speeds, and carrying passengers, with great safety, at the rate of two cents per mile.

The net earnings for the five years have hardly equalled the accruing interest on the company's indebtedness. The amount paid on account of the latter has been \$3,087,986, exceeding by \$53,467, the total net earnings.

The gross earnings have equalled very nearly 15 per cent. on the cost of the road, and about 17½ per cent. on the indebtedness of the company. The current expenses have equalled 66.41 per cent. of the earnings. The cost per mile for trains run has been 143.71 cents.

Compared with other roads, the cost of operating this has been excessive. This has been owing, in part, to the very large items for contingencies which for the years embraced have amounted to the following sums—

1854	\$269,813
1855	281,657
1856	284,836
1857	250,468
1858	218,088

The "contingencies," for 1855 and 1856, were made up of the following items—

1855.	
Paid Harlem railroad	\$72,827
" Troy and Greenbush railroad	51,846
" Troy Union	44,257
" hauling cars	40,828
" rents	20,499
" printing, etc.	6,892
" ferry boats	18,028
" sundries	26,479
	<u>\$281,657</u>

1856.	
Paid Harlem railroad	\$64,467
" Troy and Greenbush railroad	77,078
" Troy Union railroad	35,181
" hauling cars by horses	42,168
" rents	29,771
" printing, etc.	6,911
" ferry at Albany	13,474
" sundries	15,368
	<u>\$284,518</u>

Since 1856, the items that make up contingencies have not been given. The Troy and Greenbush railroad is leased by the Hudson river. The latter pays 7 per cent. on \$275,000, equalling \$19,250. The amount charged as paid to that road is made up of this sum, and current expenses for operating it. The receipts are included in those of the Hudson river road.

The amount paid the Harlem road is the balance due it under a contract in reference to the *through* business of the two roads. The agreements under which these sums were paid, have been discontinued.

The cost of maintenance of track has been moderate, equalling only 19.94 cents per mile run, which is so low for the high speeds at which the trains have been run, that we presume the rails and ties have not been fully maintained, and that, consequently, the amount expended upon track, will continue to increase for some years to come.

On the other hand, the cost of fuel and repairs of engines has been excessive, and will probably be largely reduced. By the use of coal, the expense for fuel may be reduced \$100,000 annually, at least. The cost of repairs of engines is 33 per cent. higher than it need be, and that per centage higher than it is on the average of roads having an equal traffic. The cost of oil and waste is twice too high, judged by similar standards.

Thus far the road has shown itself to be hardly worth the debt resting upon it. The accruing interest has not been met by some \$10,000 annually. No surplus fund, consequently, has been accumulated—nothing whereby to meet the contingencies of an accident, or for renewing the superstructure. We have no reason to look to a very rapid increase of receipts. It is somewhat remarkable that these for 1854 and 1855 are very nearly the same.

It may be said in favor of the road that both it and the rolling stock is maintained in admirable condition, and that the road is managed with a great deal of energy, and safety, so far as travelers are concerned. It is of the greatest value to the city of New York, and to the whole line of railroad extending from Albany to the Mississippi River. It deserves much better success than it has so far achieved; yet we presume it has paid fully 7 per cent. net upon its actual cost. The money lost in one way or another, together with the scrip issued by way of interest on the stock till the road was opened, have probably been quite equal to the amount of stock outstanding.

Statement showing the operations of the Hudson River Railroad, for a period of five years, ending September 30th, 1888.

HUDSON RIVER RAILROAD.

1. TABLE showing the cost of construction and equipment, earnings, etc.

Years.	Cost of road and equipment.	Main line.	Second track.	Equivalent in single track.	Paid-up stock.	Funded debt.	Floating debt.	Miles operated incl. road rented.	Total miles run by locomotives.	Passengers carried one mile.	Tons of freight carried one mile.	From passenger traffic.	From freight traffic.	Total, incl. mails, etc.	Receipts from all sources.	Expenditures on all accounts.	Receipts over expenditures.	Amount applied to interest.
1884.....	\$12,391,863	144.0	100.0	244.0	\$8,757,892	\$8,006,485	\$927,369	150	882,375	76,830,660	13,141,520	\$1,237,308	\$464,145	\$1,753,986	\$1,578,986	\$1,208,818	\$465,168	\$589,469
1885.....	12,737,868	144.0	101.0	245.0	8,758,466	8,842,000	408,363	150	882,483	74,691,074	15,221,756	1,213,970	565,717	1,812,088	1,869,806	1,208,141	661,664	611,844
1886.....	12,802,528	144.0	106.5	250.5	8,758,466	8,842,000	399,311	150	880,706	57,251,948	20,116,080	1,101,475	724,017	1,905,710	1,924,882	1,239,573	684,809	651,815
1887.....	11,288,019	144.0	106.5	250.5	8,758,466	8,842,000	453,315	150	776,166	58,928,855	19,642,158	1,132,319	707,066	1,839,416	1,902,828	1,213,948	688,880	650,899
1888.....	11,328,989	144.0	106.5	250.5	8,758,466	8,842,000	455,003	150	700,224	56,416,865	18,416,865	1,042,865	544,368	1,636,412	1,585,771	1,041,773	543,998	634,969
Average.....	12,108,759	144.0	104.1	248.1	8,758,381	8,674,887	528,672	150	824,391	64,823,880	18,307,665	1,145,387	601,068	1,789,522	1,807,364	1,200,450	606,908	617,697

2. TABLE showing the cost of repairing and operating the road and equipment, etc.

Years.	Road-bed and track.	Buildings fences, etc.	Taxes on real estate.	Total cost.	Engines & tenders.	Cars and trucks.	Tools and machinery.	Total, incl. incidentals.	Conductors, brakemen, etc.	Engineers and firemen.	Coal and wood.	For engines.	For cars.	Total cost.	Office and stationery.	General superintendence.	Clerks, laborers, etc.	Losses and damages.	Total, incl. all others.*	Grand total of cost.
1884.....	\$160,094	\$8,469	\$10,187	\$178,750	\$94,761	\$68,810	\$2,945	\$176,187	\$57,047	\$44,008	\$181,416	\$18,208	\$9,795	\$310,534	\$4,416	\$6,758	\$191,427	\$23,576	\$408,279	\$1,160,765
1885.....	102,240	7,842	18,821	128,903	117,582	65,990	5,048	197,495	50,358	37,919	226,700	20,524	6,665	352,166	2,931	29,515	161,510	23,928	\$406,192	1,184,706
1886.....	158,214	11,186	21,026	190,429	78,319	67,410	4,453	156,576	52,265	36,081	229,413	16,382	6,132	381,388	2,179	18,478	178,208	32,048	541,184	1,239,573
1887.....	158,502	16,030	24,815	199,348	105,541	87,769	5,707	211,293	49,423	39,219	210,255	12,057	5,095	316,049	2,239	8,300	185,921	32,288	588,114	1,261,804
1888.....	221,465	13,313	23,160	257,938	68,284	58,523	8,224	138,800	41,846	40,147	150,015	8,475	4,038	244,521	1,886	5,987	162,188	12,483	402,764	1,044,104
Average.....	160,512	11,368	19,602	191,073	117,582	65,990	5,048	156,576	50,358	37,919	226,700	16,382	6,132	352,166	2,179	18,478	178,208	32,048	541,184	1,184,706

3. TABLE showing the cost (in cents) per mile run by locomotives with trains, reduced from Table No. 2.

1884.....	18.14	0.96	1.15	20.26	10.74	7.69	0.33	19.97	6.46	4.38	20.56	2.06	1.11	35.18	0.50	0.76	21.09	2.67	66.13	131.54
1885.....	11.58	0.89	2.13	14.60	18.82	7.48	0.57	22.88	5.71	4.29	26.82	2.33	0.83	38.90	0.33	4.34	18.30	2.59	67.86	134.24
1886.....	17.96	1.27	2.30	21.62	8.83	7.66	0.51	17.78	6.34	4.17	27.20	1.86	0.70	38.88	0.23	2.09	20.28	3.64	61.45	140.74
1887.....	20.42	2.07	2.20	25.69	13.59	11.31	0.73	27.22	6.97	5.06	27.09	1.56	0.65	40.72	0.29	0.81	23.36	12.92	69.83	142.96
1888.....	31.62	1.90	3.31	36.83	9.75	8.35	0.46	19.83	5.98	6.78	21.42	1.21	0.58	34.92	0.26	0.85	23.16	1.78	67.52	149.11
Average.....	19.72	1.09	2.43	23.79	10.74	7.69	0.33	19.97	6.46	4.38	20.56	2.06	1.11	35.18	0.50	0.76	21.09	2.67	66.13	131.54
1894.....	1.42	12.18	119.00	56.78	42.49	2.60	107.18	80.46	24.28	123.09	9.02	8.79	190.60	1.63	8.85	107.33	22.70	301.79	716.56	
		2.43	23.79	11.16	8.49	0.52	21.43	6.09	4.85	24.62	1.80	0.76	38.12	0.32	1.77	21.46	4.54	60.36	143.71	

4. TABLE showing the receipts, etc., per mile run, and the ratio of expenditures, etc., to total expenditures, etc.

Years.	Total receipts, per mile run.	Total expenditures, per mile run.	Total net receipts, per mile run.	Per cent. ratio of expenditures.	Road, track, etc.	Rolling stock.	Operating cost.	Miscellaneous.	Cost of road, per mile.	Capital stock.	Funded debt.	Floating debt.	Total receipts, per mile.	Total expenditures, per mile.	Net receipts, per mile.
1884.....	\$1.99	\$1.47	\$0.52	73.87	15.40	15.09	26.74	42.77	\$86,051	\$26,096	\$15,600	\$6,440	\$12,180	\$9,019	\$3,161
1885.....	2.12	1.37	0.75	64.89	10.88	16.66	29.72	42.73	88,459	26,101	61,402	2,837	12,985	8,390	4,595
1886.....	2.19	1.41	0.78	64.89	15.36	12.64	28.33	43.68	88,906	26,101	61,402	2,778	13,864	8,008	4,756
1887.....	2.45	1.56	0.89	63.66	15.76	16.70	25.00	42.54	78,354	26,101	61,402	3,148	13,214	8,430	4,784
1888.....	2.26	1.48	0.78	65.49	24.70	13.30	28.42	38.57	78,673	26,101	61,402	3,159	11,012	7,235	3,777
Average.....	2.19	1.45	0.74	66.41	16.42	14.88	26.65	42.46	84,088	26,099	60,242	3,602	12,551	8,336	4,215

* Under this head are included—rents and payments to other companies, ferry and telegraph expenses, station expenses, baggage in New York City, etc.

Western and Atlantic Railroad.

The gross earnings of this road for the year ending September 30, 1854, were \$591,154 78
Working expenses, (43 per cent.) 253,031 78

Net earnings \$338,123 00
Gross earnings to Sept. 30, 1855 \$688,930 56
Working expenses, (37½ per cent.) 259,883 33

Net earnings \$429,047 23
Gross earnings to Sept. 30, 1856 \$871,366 53
Working expenses, (43½ per cent.) 380,668 55

Net earnings \$490,697 63
Gross earnings to Sept. 30, 1857 \$900,808 95
Working expenses, (88½ per cent.) 435,827 55

Net earnings \$461,981 40
The total of the net earnings for the four years, was, according to official reports, \$1,722,849 31.

The yearly average of the net earnings was \$430,712 32, and the monthly average \$35,892.

The gross earnings of the road to Sept. 30, 1858, were \$800,001 28
Working expenses, (49¼ per cent.) 394,227 84

Net earnings \$405,773 84

Railroad Traffic.

There is an improvement, though not very great, in the traffic of most of the railroads of Illinois. Notwithstanding the low prices which prevail for all kinds of produce, the favorable influence of an abundant crop begins to be felt. Large quantities of grain are being collected at Chicago. The two Michigan railroads still show no gain, but a heavy loss upon last year. Nearly all the Eastern and Western movement is done on the lakes and canal, in merchandize as well as in produce. The leading railroads of Ohio are doing quite as well as last year. We presume the receipts of the New York Central are up to those for 1858. We have not heard from the Erie. In the transition state in which the management has been for some time past, we presume not much attention has been paid to the traffic. In other parts of the country, particularly in New England and the South, the railroads are doing remarkably well; the dark spot is mainly confined to the territory lying between New York and Chicago, and embracing Northern Illinois and Wisconsin. Matters here, are still badly out of joint.

English vs. American Rails.

There was laid in May last on the South Carolina Railroad, on the straight line below Fort Valley, on a heavy grade, 73 tons of new T rails, weighing 40½ lbs. to the yard—one-half of which was from the Lackawanna Iron Works; and the other half English—the American rail on one side, and the English on the other, for the purpose of testing the wear of the different kinds of iron.

METALS for RAILROAD COMPANIES.

LUCIUS HART,
IMPORTER AND DEALER IN METALS,
4 and 6 Burling Slip, NEW YORK.
BLOCK TIN. SELLER. HABBITT METAL.
ANTIMONY. FIG LEAD. INGOT COPPER.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

C. CONGREVE & SON,
13 Cliff St., N. Y.

FAY, WOOD & CO.,
214 Pearl st., NEW YORK,
MANUFACTURERS OF
WHITE LEAD, ZINC,
COPAL VARNISHES AND
JAPANS.

Also, PUTTY, PAINTS and COLORS.

FULTON FOUNDRY AND MACHINE WORKS,
P. F. GEISSE,
WELLSVILLE, OHIO.

STEAM ENGINES of every variety built to order. STEAM BOATS and STEAM FERRY BOATS contracted for in whole.

PUTNAM'S PATENT Turn-Tables (a very superior and simple table of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought-iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. GEISSE'S annealing process may be obtained from the Patentee at Wellsville, O., or from T. Culbertson, No. 8 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburg, Little Miami, and Steubenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

RAILROAD IRON.
The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, Aug. 1, 1858.

RAILROAD IRON.
THE RENNELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.
New York Agency:
BUSING, CROCKER & DODGE,
33 Cliff St.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS AND SPIKES, FIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of **IRON** can be executed.
August 16, 1854.

CAST STEEL,
Of First Quality and Warranted.
BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL,
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff St., New York.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.
Erie Rails, 57 to 59 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the **MAGNETIC ORES** from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a **quality of iron not surpassed.** These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for **RAILROAD IRON** of any pattern and weight, **Car Axles, Spikes, and Merchant Iron.** They have on hand patterns for **T Rails**, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 63, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, **46 Exchange Place, N. Y.**
Address **J. H. SCRANTON, President,**
Scranton, Pa.
or **DAVID S. DODGE, Treasurer,**
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPTON,
44 Exchange Place.
New York, 1st June, 1859.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUNTER & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their **G. L. Railroad Iron, and Common Bars,** on most advantageous terms.

R. & J. MAKIN, 70 Broad st.
RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. **29 Central Wharf.**

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,
MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new **ROLLING MILL**, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited from Roads in other sections of the country; and work will be made with New Iron in the hands, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation
February, 1855.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address S. box 982 Baltimore Post Office. 2m33

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

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WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE.
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

The Machinery Department of our Establishment is under the supervision of THATCHER PERKINS, Esq., for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO.,

MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS,

SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,

Armitage's Genuine Mousehole Anvils, etc.

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Near LEEDS, Yorkshire,

MANUFACTURERS OF

LOCOMOTIVE TIRES,

TIRE BARS,

BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,

OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPLY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1856, and May 10, 1859.



THIS Road is constructed exclusively of Iron, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

ALSO

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE. This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E. Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

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THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
GASWELL & PERKINS,
Brokers, 69 Wall st.
New York, July 9, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 66 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.
M. K. JESUP & COMPLY,
New York, June, 1859. 44 Exchange Place.

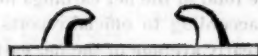
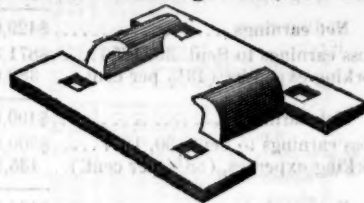
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "NEW YORK WROUGHT IRON RAILROAD CHAIR COMPANY," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the head, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Penna. Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. Jacon Rowe, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections.

T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,
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Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
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STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
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RAILROAD IRON. WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at Johnstown, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

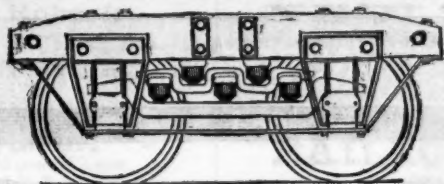
PHILADELPHIA (North Penna. R. R. Building).
OFFICE, No. 407 Walnut st.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BULGOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

NEW YORK METALLIC CAR SPRING COMPANY,



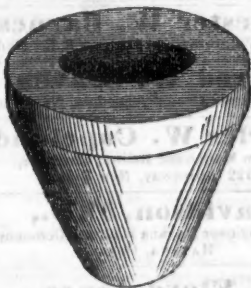
SOLE MANUFACTURERS OF THE
CONICAL VOLUTE STEEL CAR SPRING,
OFFICE, 54 WILLIAM ST., NEW YORK.
C. PALMER, CHAS. D. GIBSON, RICHARD VOSE,
Pres't. Treas'r. Sec'y.

JAMES JEFFRIES & SONS,
MANUFACTURERS OF
**LOCOMOTIVE, CAR AND TANK
SPRINGS,**
PHILADELPHIA, (rear of Girard House.)
REFERENCES.

M. W. BALDWIN & CO. R. NORRIS & SON. A. WHITNEY & SONS, Philadelphia; JOS. R. ANDERSON, Richmond; SMITH & PERKINS, Alexandria, Va.; JNO. EDGAR THOMSON, of Penn. R. R.; EDWARD C. DALE, of P. G. & N. R. R.; S. RUTH, of Rich. F. & P. R. R.; THOS. DODAMEAD, of Va. Central; URIAH WELLS, Petersburg; H. B. BIRD, South Side R. R., Petersburg; C. O. SANFORD, of Petersburg R. R.; JNO. R. McDANIEL, of Va. & Tenn. R. R.; JAS. P. ROBERTSON, of Wilmington and M. R. R.; HENRY T. PEAKE, of S. C. R. R.; S. S. SOLOMONS, of North East R. R.; JOHN FLYNN, of Western & Atlantic R. R.; E. F. ROWARTH, of Greenville & Col. R. R.; GEO. YONGE, of Georgia R. R.; WM. CLARK, of Muscogee R. R.; W. W. BALDWIN, of Montgomery & W. P. R. R.; WM. M. WADLEY, of N. O. J. & G. N. R. R.; A. B. SEGER, of Opelousas R. R.; C. WILLIAMS, of Vicksburg; ALLEN S. SWEET, of Buffalo and Erie R. R.; F. C. ARMS, of Memphis; H. COFFIN, of Memphis; A. WORREL, of Seaboard & R. R. R.; UNION CAR WORKS, Portsmouth; WM. M. HIGHT, of Augusta; S. & R. H. RIKERS, WHARTON & PATSCH, Charleston, and all Roads where our SPRINGS are in use.

Will be happy to furnish a SET OF SPRINGS to such companies as may wish to try their Durability and Elasticity, by writing us the Length, Width, Curve over all, and the weight which they are to bear.

ELASTIC CONE SPRING CO.,
OFFICES: 20 Exchange Place, New York,
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MANUFACTURERS of the PATENT ELASTIC CONE SPRINGS for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the JOSLIN Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

Patent Reversible Baggage Check.

EDMUND HOOLE,
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SOLE MANUFACTURER.
BAGGAGE CHECKS
of every description at the shortest
notice. Also Oil, Wood and Coal
TICKETS OF BRASS.

**CINCINNATI
VIA DUNKIRK
& COLUMBUS
666**

STEEL CAR SPRINGS,



MANUFACTURED

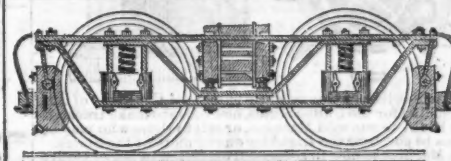
BY THE

PATENTEE,

CARLOS FRENCH,

SEYMOUR, CONN.

THESE SPRINGS are now in use on many of the leading Railroads East, South and West.
Samples can be examined and Price Lists obtained at
No. 5 Gold st., NEW YORK.



**THE HUMPHREYSVILLE
MANUFACTURING COMPANY,**
(SUCCESSORS TO DWIGHTS, FRENCH & CO.)
SEYMOUR, CONN.,

ARE prepared to fill, at short notice, of the best materials and workmanship, orders for Wrought and Cast Iron Work, fitted ready for use, for the building or repairs of Passenger and Freight Cars, complete or in part.
A sample wrought iron truck can be seen at our office.
No. 5 Gold st., NEW YORK.

We also manufacture—

BEST FAGGOTTED CAR AXLES,
SALISBURY IRON CAR WHEELS,
WROUGHT IRON BOLTS, NUTS AND WASHERS,
RAILROAD JACK SCREWS, ETC.

RAYMOND FRENCH, President, Seymour, Conn.
WM. H. MARSHALL, Treasurer, No. 5 Gold st., N. Y.

SAFEGUARD INSURANCE COMPANY.

OFFICE: 12 Wall st., NEW YORK;
409 Walnut st., PHILADELPHIA.
CAPITAL, \$200,000.

THE SAFEGUARD INSURANCE COMPANY
Having retired that portion of the Capital Stock which was based upon Securities out of this State, are now prepared to continue the Insurance business, and will insure against loss or damage by Fire, on Houses, Merchandise, Lessees and the risks of Inland Navigation, on as favorable terms as other Companies.

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Co. " Hon. Franklin Steele, Minne-
Geo. P. Rogers, Esq., " sota.
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INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
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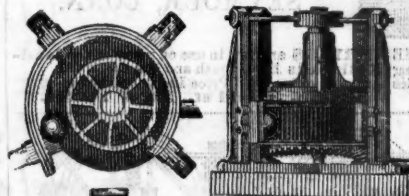
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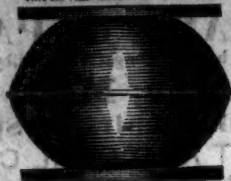
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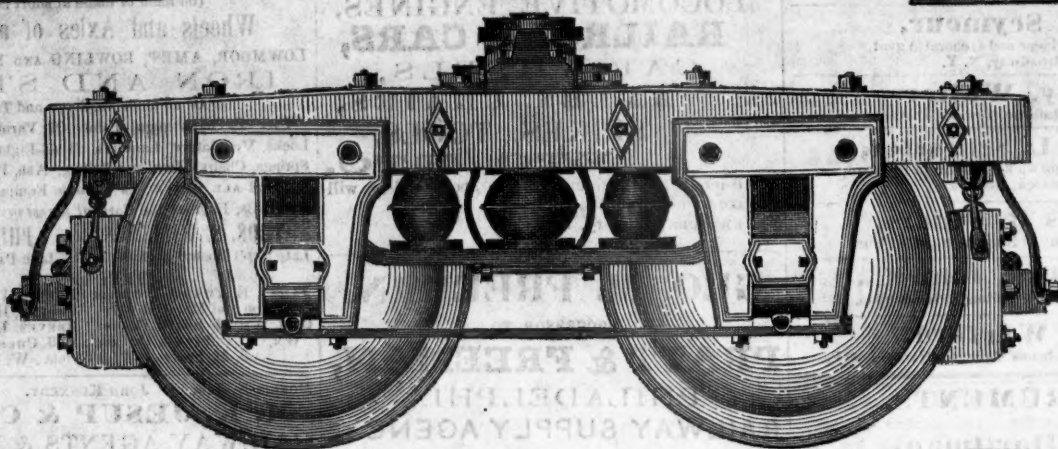
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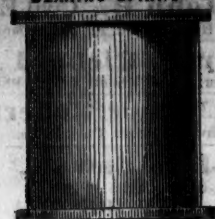
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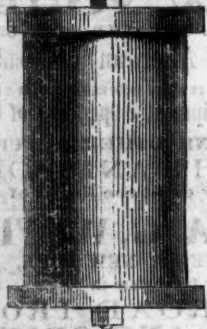
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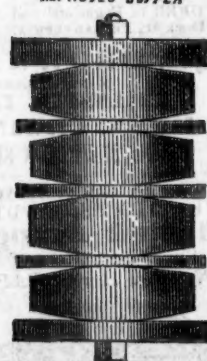
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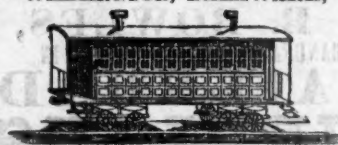
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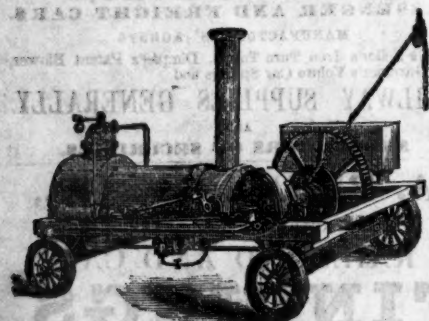
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